# **Section 7.1: Water Shortage Contingency Plan**

To address potential water supply shortages resulting from drought, natural disaster or wholesale water supply system failures, Mountain View has developed a Water Shortage Contingency Plan. As defined by the Urban Water Management Plan Act, this contingency plan details four water supply reduction scenarios: 10, 25, 40 and 50 percent. Each stage of action is discussed in detail below.

# Water Shortage Contingency Plan Stages of Action

The City will consider implementing each stage of the Water Shortage Contingency Plan when Mountain View's water supply is reduced by a specific level: 10%, 20%, 40% and 50%. Each stage of action in the Water Shortage Contingency Plan is discussed on the following pages and is also detailed on Table 35 at the end of this section.

Implementation of the plan will be contingent upon adoption of draft Water Conservation Ordinances, Appendix G, by the City Council. A constant factor in each water supply reduction scenario is the enforcement of five existing water prohibitions currently incorporated into Mountain View's City Code. These prohibitions, which are currently enforced on a complaint basis, are:

- 1. Preventing water runoff on sidewalks.
- 2. Wasting water due to broken or defective plumbing, sprinkler, watering or irrigation systems.
- 3. Serving water in restaurants, except on request.
- 4. Installing single-pass cooling systems on new construction.
- 5. Using hoses without an automatic shut-off device for cleaning paved surfaces.

# Stage 1: 10 Percent Water Supply Reduction

A 10 percent water supply reduction scenario will intensify existing conservation programs, focusing attention on public information and outreach. Irrigation for City parks and roadway landscaping would be reduced by 15 percent.

Mountain View will also add a prohibition on washing cars, buses, boats, or other vehicles and equipment using a hose without an automatic shut-off device.

# Stage 2: 25 Percent Water Supply Reduction

A 25 percent water supply reduction program implements six additional water use prohibitions, focusing on further reducing irrigation and ornamental water use. Attention would be focused on water audits of properties having significant landscape irrigation needs. These property owners or managers would be provided information on water budgeting and weather based irrigation use. City park and roadway landscape irrigation would also be reduced by 33 percent. The six additional water use prohibitions are:

- Cleaning any paved or hard surface with water.
- Operating decorative fountains.
- Using drinking water for construction purposes except where reclaimed water is not available.
- Irrigating landscape from 9:00 a.m. to 3:00 p.m. (9:00 a.m. to 6:00 p.m. during daylight savings time).
- Draining or refilling swimming pools except for health and safety reasons.
- Using an average of more than 750 gallons per day (gpd) in a single-family residence in two consecutive billing periods.

# Stage 3: 40 Percent Water Supply Reduction

City park and roadway landscape irrigation will be reduced by a total of 50% and this scenario will also implement four additional prohibitions to the 25 percent program.

The four new water use prohibitions are:

- Using an average of more than 620 gpd in a single-family residence in two consecutive billing periods.
- Deferring landscape (excluding trees) installation at new commercial construction.
- Washing vehicles, except in automatic car washes using recycled water.
- Filling new swimming pools.

The City also has the option of implementing two optional water use prohibitions under the 40% water reduction scenario. These are:

- Possible prohibition of all turf irrigation.
- Possible requirement that all homes sold in the City be retrofitted with Ultra low flush toilets (ULFTs).

# Stage 4: 50 Percent Water Supply Reduction

Under a 50 percent water supply reduction program, the City will consider prohibiting any new development and limiting single-family water use to 500 GPD in two consecutive billing periods. In addition, park and roadway landscape irrigation would be reduced by a total of 60 percent from pre-drought levels.

Enforcement of all water use prohibitions under the previous water reduction scenarios would be intensified and penalties would be assessed for noncompliance. Penalties would be determined at the time a 50% reduction program is considered.

Table 35: Mountain View's Water Shortage Contingency Plan

	Current Program	STAGE 1 10 Percent Program	STAGE 2 25 Percent Program	STAGE 3 40 Percent Program	STAGE 4 50 Percent Program
Prohibition			<u> </u>		Ü
Cleaning sidewalks, driveways, patios, parking lots or other paved or hard-					
surfaced areas without a positive automatic shutoff device.	Χ	X	X	X	Χ
Flooding and water runoff on sidewalks.	Х	Х	Х	X	Х
Washing cars, buses, boats, trailers or other vehicles without a positive					
automatic shutdown valve on the end of the hose.	X	X	X	X	X
Wasting water due to broken or defective plumbing, sprinkler, watering or					
irrigation systems.	Χ	Χ	X	X	Χ
Serving water in restaurants, except upon request.	Χ	Χ	X	X	Χ
Single-pass cooling systems on new construction.	Χ	X	X	X	Χ
Operating decorative fountains.			X	X	Χ
Using drinking water for construction purposes, except where reclaimed water is					
unavailable.			X	X	X
Irrigating landscape from 9:00 a.m. to 3:00 p.m. (9:00 a.m. to 6:00 p.m. during					
daylight savings time).			X	X	X
Flushing hydrants, except for public health or safety.			X	X	Χ
Draining or refilling of swimming pools except for health and safety reasons.			X	X	Χ
Use of potable water by a single-family residence in excess of an average of					
750 gallons per day in two consecutive billing periods.			X	X	X
Deferred landscaping of new commercial construction; however, trees may be					
planted at the discretion of the property owner.			Voluntary	X	X
Use of potable water by a single-family residence in excess of an average of					
620 gallons per day in two consecutive billing periods.				X	Х
Washing cars, except in automatic car washes using recycled water.				X	Χ
Filling new swimming pools.				X	Х
Use of potable water for irrigation.				Considered	Χ
Sale or resale of a single-family residence or commercial building with toilets					
using greater than 1.6 gallons of water per flush or shower heads using greater					
than 2 gallons of water per minute.				Considered	Considered
Operation of a pool without a cover.					X
Refilling existing private swimming pools.					Χ
Use of potable water by a single-family residence in excess of an average of					
500 gallons per day in two consecutive billing periods.					Х
New hookup moratorium.					Considered

Water Shortage Contingency Plan Stages of Action	Current	STAGE 1	STAGE 2	STAGE 3	STAGE 4
Other Elements:	Program	10 Percent	25 Percent	40 Percent	50 Percent
		Program	Program	Program	Program
Water Savings in City Parks under the different Stages		15 Percent	33 Percent	50 Percent	60 Percent
Enforcement		Complaint	Complaint	Active	Active Patrol**
		Basis*	Basis*	Patrol**	
Outreach:					
Landscape water conservation requirements for new commercial, industrial,					
institutional, governmental and multi-family developments (prescriptive					
approach).	X	X	X	X	Χ
Public information program.	X	X	X	X	Х
School education.	X	X	X	X	X
Showerhead retrofit program.	X	X	Χ	X	Χ
Ultra-low-flush toilet retrofit program.	X	X	Χ	X	Χ
Full-time Water Conservation Coordinator.	10% Position	10% Position	50% Position	75% Position	100% Position
Low-water-use washing machine incentive program.	X	X	X	X	Χ
Quarterly "View" articles, annual water quality report article and web site					
updates.			X	X	Χ
Monitored Water Usage:					
Metering of all connections.	X	X	Χ	X	X
Enforce State requirements for ultra-low-flush toilets in new construction.			X	X	Χ
Residential water audits.			X	X	X
Large commercial and multi-family user audits.			Χ	X	X
Turf audits for irrigators over one acre.				X	Χ
Distribution system water audits, leak detection and repair.				X	Χ
Allocation system for all residents and businesses.					Possible
Cost Incentives:					
Conservation pricing/inverted rates.	X	X	X	X	X
Add additional water rate tier to current three-tiered structure.				X	X
Penalties assessed for noncompliance.				Х	Х

#### \*Complaint basis enforcement:

- Two education/warning visits or phone calls from Water Division personnel.
- Third warning visit from Police/Code Enforcement; fourth complaint or blatant violation cited by Police, with possible flow restriction.
- Upper-use violation receives one warning letter in the first billing period if the limit is exceeded; fine issued in second billing period.

#### \*\* Active Patrol enforcement:

- City patrolled by Water Division personnel and Code Enforcement.
- Citation after second warning; monetary fines assessed and possible flow restriction.

# **Water Supply Shortage Conditions**

A reduction in Mountain View's water supply could be the result of a number of factors including drought, natural disaster or water supply system failure. As Mountain View receives the majority of it's water from the SFPUC, any supply reduction from this water source will have the greatest effect on the City. However, large-scale water shortages, 40% and 50%, may also be attributed to reductions in Mountain View's other supplies, including the SCVWD wholesale supply and groundwater. A potential water supply shortage is detailed in Table 36 below.

**Table 36: Potential Water Supply Shortage Scenario** 

Stage	Water Supply Conditions	Percent Shortage
1	Reduction in supply from the SFPUC.	10%
2	Further reduction in supply from the SFPUC.	25%
3	Reduction in supply from both the SFPUC and SCVWD.	40%
4	Reduction in supply from both agencies and SCVWD restrictions on groundwater pumping.	50%